

We claim:

1. A fiber-optic mouse pad for use with an optical mouse, comprising:
  - a pad having a top surface for receiving an optical mouse; and
  - a plurality of optical fibers extending a distance laterally under said top surface of said pad, said optical fibers each having first and second ends, said first ends bundled together to define a common light inlet exposed to light emitted from the optical mouse during normal use thereof, said second ends extending through said top surface of said pad at different points defining a desired illumination pattern,whereby the desired illumination pattern may be illuminated remotely by moving the optical mouse over said light inlet.
2. The fiber-optic mouse pad of claim 1, further comprising a light collector disposed below said top surface of said pad and adjacent to said common light inlet defined by said first ends of said fibers.
3. The fiber-optic mouse pad of claim 2, wherein said light collector includes at least one reflector disposed below said top surface of said pad and oriented so as to reflect downwardly directed light from the optical mouse toward said common light inlet.
4. The fiber-optic mouse pad of claim 3, further comprising a cup embedded in said pad, wherein said at least one reflector is formed as a portion of an inner wall of said cup.
5. The fiber-optic mouse pad of claim 4, wherein said inner wall of said cup is octagonal.
6. The fiber-optic mouse pad of claim 5, wherein said first ends of said fibers are terminated in said cup.

7. The fiber-optic mouse pad of claim 6, further comprising a transparent cover over said cup, said cover having a top surface substantially flush with said top surface of said pad.

8. The fiber-optic mouse pad of claim 7, wherein said pad includes a top layer and a lower layer affixed to each other, wherein said lower layer has a channel formed therein between said common light inlet and a point in proximity to said desired illumination pattern, and wherein said optical fibers are at least partially contained within said channel.

9. The fiber-optic mouse pad of claim 8, further comprising a non-skid layer affixed to the bottom of said lower layer of said pad.

10. The fiber-optic mouse pad of claim 9, wherein said top surface of said pad is substantially opaque.

11. The fiber-optic mouse pad of claim 1, wherein said pad includes a top layer and a lower layer affixed to each other, wherein said lower layer has a channel formed therein between said common light inlet and a point in proximity to said desired illumination pattern, and wherein said optical fibers are at least partially contained within said channel.

12. The fiber-optic mouse pad of claim 11, further comprising a non-skid layer affixed to the bottom of said lower layer of said pad.

13. The fiber-optic mouse pad of claim 12, wherein said top surface of said pad is substantially opaque.

14. A fiber-optic mouse pad for use with an optical mouse, comprising:  
a pad having a top surface for receiving an optical mouse, said top surface being substantially opaque;

means contained within said pad for collecting light emitted from the optical mouse on said top surface; and

means optically coupled to said light collecting means for transmitting light under said top surface to a plurality of points remote from the optical mouse and for directing light from said remote points through said top surface.

15. The fiber-optic mouse pad of claim 14, wherein said light collecting means includes at least one reflector oriented so as to reflect downwardly directed light from the optical mouse toward said light transmitting means.

16. The fiber-optic mouse pad of claim 15, further comprising a cup embedded in said pad, wherein said at least one reflector is formed as a portion of an inner wall of said cup.

17. The fiber-optic mouse pad of claim 16, wherein said light transmitting means includes a plurality of optical fibers terminated on a first end in said cup and forming on a second end thereof a pattern of points on said top surface defining a desired illuminated pattern.

18. The fiber-optic mouse pad of claim 14, wherein said light collecting means includes a plurality of optical fibers exposed on a first end to said top surface of said pad, said optical fibers forming on a second end thereof a pattern of points on said top surface defining a desired illuminated pattern.

19. A fiber-optic mouse pad for use with an optical mouse, comprising:

a pad having a top layer with a substantially opaque flat top surface for receiving an optical mouse, and a lower layer affixed to said top layer and having a channel formed therein extending laterally under said top surface between a first area of said pad and a second area of said pad remote from said first area;

a reflective cup embedded in said first area of said pad, said reflective cup having an inner wall defining a plurality of plane reflective surfaces below said top surface;

a transparent cover over said cup, said cover having a flat top surface substantially flush with said top surface of said pad;

a plurality of optical fibers each having first and second ends, said first ends bundled together and terminated in said cup in optical alignment with said reflective surfaces thereof, said optical fibers extending from said cup through said channel to said second area of said pad, said second ends extending separately through said top surface of said pad in said second area thereof in a predetermined pattern,

whereby light emitted from the optical mouse is transmitted under said top surface of said pad and emitted at said second ends of said optical fibers as points of light in said predetermined pattern.